# **EAST Search History**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	6	(harris brimble).in. and neuroprotect\$.ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/28 11:33

=> b reg
FILE 'REGISTRY' ENTERED AT 10:33:43 ON 28 JUL 2007
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STRUCTURE FILE UPDATES: 27 JUL 2007 HIGHEST RN 943585-98-6 DICTIONARY FILE UPDATES: 27 JUL 2007 HIGHEST RN 943585-98-6

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TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> d que sta l16 L1 STR

REP G1=(0-3) C NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

L16 1389 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 44612 ITERATIONS SEARCH TIME: 00.00.01

1389 ANSWERS

=> d que sta 121 L1 STR

REP G1=(0-3) C
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

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STEREO ATTRIBUTES: NONE

L16 1389 SEA FILE=REGISTRY SSS FUL L1 L19 STR

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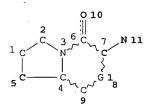
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L21 32 SEA FILE=REGISTRY SUB=L16 SSS FUL L19

100.0% PROCESSED 580 ITERATIONS 32 ANSWERS

SEARCH TIME: 00.00.01

=> d que sta 134 L1 STR



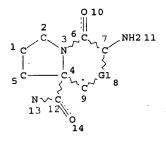
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L16 1389 SEA FILE=REGISTRY SSS FUL L1

L32 STR



REP G1=(0-3) C NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

5 SEA FILE=REGISTRY SUB=L16 SSS FUL L32

100.0% PROCESSED 136 ITERATIONS

SEARCH TIME: 00.00.01

5 ANSWERS

=> b hcap FILE 'HCAPLUS' ENTERED AT 10:33:56 ON 28 JUL 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 28 Jul 2007 VOL 147 ISS 6 FILE LAST UPDATED: 27 Jul 2007 (20070727/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d bib abs hitstr ll1 tot

L11 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:657613 HCAPLUS

145:293325 DN

Synthesis of macrocyclic analogues of the neuroprotective agent ΤI

glycyl-L-prolyl-L-glutamic acid (GPE)

ΑU Harris, Paul W. R.; Brimble, Margaret A.

Department of Chemistry, University of Auckland, Auckland, N. Z. Organic & Biomolecular Chemistry (2006), 4(14), 2696-2709 CS

so CODEN: OBCRAK; ISSN: 1477-0520

PΒ Royal Society of Chemistry

DT Journal

LA English

CASREACT 145:293325 os

GΙ

AB Seven macrocyclic analogs, e.g., I TTFA, of the neuroprotective tripeptide glycyl-L-prolyl-L-glutamic acid (GPE) were prepared via Grubbs ring closing metathesis of an appropriate diene precursor, which was obtained from allyl-substituted amino acid building blocks, e.g., II (Boc = tert-butoxycarbonyl). Two of the macrocycles mimic the cis conformer of GPE, whereas the others, including I TTFA, mimic the trans conformer of GPE.

IT 765313-71-1P 765313-87-9P 908568-57-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (synthesis of macrocyclic analogs of neuroprotective agent glycyl-L-prolyl-L-glutamic acid via Grubbs ring closing metathesis)

RN 765313-71-1 HCAPLUS

CN L-Glutamic acid, N-[[(3S,6S,10aS)-6-aminodecahydro-5-oxopyrrolo[1,2-a]azocin-3-yl]carbonyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 765313-70-0 CMF C16 H25 N3 O6

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

N 765313-87-9 HCAPLUS

CN L-Glutamic acid, N-[[(3S,6S,10aR)-6-aminodecahydro-5-oxopyrrolo[1,2-a]azocin-3-yl]carbonyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 765313-86-8 CMF C16 H25 N3 O6 Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 908568-57-0 HCAPLUS

CN: L-Glutamic acid, N-[[(6S,10aS)-6-aminooctahydro-5-oxopyrrolo[1,2-a]azocin-10a(1H)-yl]carbonyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 908568-56-9 CMF C16 H25 N3 O6

Absolute stereochemistry. Rotation (-).

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RE.CNT 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:817638 HCAPLUS

DN 141:314630

TI Preparation of neuroprotective macrocyclic compounds

IN Harris, Paul W. R.; Brimble, Margaret Anne

```
Neuronz Limited, N. Z.; Neuronz Biosciences, Inc.
PA
     PCT Int. Appl., 106 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
                          KIND
                                  DATE
                                               APPLICATION NO.
                                                                       DATE
                                               2004WO-US08108
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             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR,
                              TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
              SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG
     EP---1648873
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                                                                       20040316
                           A2
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                                               2005US-0549951
                                                                       20050920
                           A 1
PRAI 2003US-456136P
                           P
                                  20030320
     2003US-505119P
                                  20030923
     2004WO-US08108
                            W
                                  20040316
     MARPAT 141:314630
OS
GΙ
```

The invention relates to macrocyclic peptidomimetics, e.g., I [R1, R2 are H, OR', SR', NR'2, NO2, CN, C(O)R', C(O)OR', C(O)NR'2, C(NR')NR'2, trihalomethyl, halo, (un)substituted alkyl, heteroalkyl, alkenyl, alkynyl, aryl, heteroaryl, arylalkyl or heteroarylalkyl, where R' is H, alkyl, heteroalkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroarylalkyl; X is CO-C4 alkyl or alkenyl], or their pharmaceutically-acceptable salts that are neuroprotective and have utility as therapeutic agents for the treatment of diseases, injuries and other conditions characterized by neuronal degeneration and/or death. Thus, macrocyclic compound II TFA salt was prepared via cyclization of cis-N-[allyl(benzyloxycarbonyl)glycyl]-5-allylproline tert-Bu ester and assayed for biol. activity (neuronal survival in animals following excitotoxic oxidative stress and neuroprotective effects in a global model of brain ischemia).

IT 765313-71-1P 765313-87-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of neuroprotective macrocyclic compds.)

RN 765313-71-1 HCAPLUS

CN L-Glutamic acid, N-[[(3S,6S,10aS)-6-aminodecahydro-5-oxopyrrolo[1,2-a]azocin-3-yl]carbonyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 765313-70-0 CMF C16 H25 N3 O6

Absolute stereochemistry.

CM 2

76-05-1 CRN C2 H F3 O2 CMF

765313-87-9 HCAPLUS RN

L-Glutamic acid, N-[[(3S,6S,10aR)-6-aminodecahydro-5-oxopyrrolo[1,2-CNa]azocin-3-yl]carbonyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM

CRN 765313-86-8 CMF C16 H25 N3 O6

Absolute stereochemistry.

CRN 76-05-1 C2 H F3 O2 CMF

### => d bib abs hitrn fhitstr 140 tot

ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN L40

2006:1108672 HCAPLUS AN

DN 146:81752

Synthesis and evaluation of novel 8,5-fused bicyclic peptidomimetic

compounds as interleukin-1 $\beta$  converting enzyme (ICE) inhibitors Soper, David L.; Sheville, Justin X.; O'Neil, Steven V.; Wang, Yili; Laufersweiler, Michael C.; Oppong, Kofi A.; Wos, John A.; Ellis, Christopher D.; Baize, Mark W.; Chen, Jack J.; Fancher, Amy N.; Lu, Wei; Suchanek, Maureen K.; Wang, Richard L.; Schwecke, William P.; Cruze, Charles A.; Buchalova, Maria; Belkin, Marina; Wireko, Fred; Ritter, Amanda; De, Biswanath; Wang, Difei; Demuth, Thomas P.

#### 10 / 549951

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Bioorganic & Medicinal Chemistry (2006), 14(23), 7880-7892
SO
     CODEN: BMECEP; ISSN: 0968-0896
PΒ
     Elsevier Ltd.
ידים
     Journal
LA
     English
os
     CASREACT 146:81752
     An 8,5-fused bicyclic peptidomimetic ring system generated by a
AB
     stereoselective ring metathesis reaction was elaborated into potent
     inhibitors of interleukin-1\beta converting enzyme (ICE, caspase-1).
     Multiple compds. were found that exhibited ICE IC50 values <10 nM and were
     selective over caspase-3 and caspase-8. These active analogs generally
     possessed good activity (IC50 values <100 nM) in a whole cell assay
     measuring IL-1ß production Pharmacokinetic anal. of the Et acetal
     prodrug form of a selected active lead revealed a compound with a reasonable
     plasma half-life (1.1 h) and good oral bioavailability (30%).
     549521-78-0P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and evaluation of peptidomimetic octahydropyrroloazocinecarboxa
        mides as interleukin-1β converting enzyme inhibitors)
     549521-78-0P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and evaluation of peptidomimetic octahydropyrroloazocinecarboxa
        mides as interleukin-1β converting enzyme inhibitors)
RN
     549521-78-0 HCAPLUS
     Pyrrolo[1,2-a]azocine-3-carboxylic acid, 6-[[(1,1-
     dimethylethoxy)carbonyl]amino]-1,2,3,5,6,7,10,10a-octahydro-5-oxo-, ethyl
     ester, (3S,6S,10aR) - (CA INDEX NAME)
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Procter & Gamble Pharmaceuticals, Inc., Mason, OH, 45040, USA

Absolute stereochemistry. Rotation (-).

CS

# RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN 2006:657613 HCAPLUS AN DN 145:293325 ΤI Synthesis of macrocyclic analogues of the neuroprotective agent glycyl-L-prolyl-L-glutamic acid (GPE) Harris, Paul W. R.; Brimble, Margaret A. ΑU CS Department of Chemistry, University of Auckland, Auckland, N. Z. Organic & Biomolecular Chemistry (2006), 4(14), 2696-2709 CODEN: OBCRAK; ISSN: 1477-0520 PB Royal Society of Chemistry DT Journal English LΑ CASREACT 145:293325 OS. GI

AB Seven macrocyclic analogs, e.g., I TFA, of the neuroprotective tripeptide glycyl-L-prolyl-L-glutamic acid (GPE) were prepared via Grubbs ring closing metathesis of an appropriate diene precursor, which was obtained from allyl-substituted amino acid building blocks, e.g., II (Boc = tert-butoxycarbonyl). Two of the macrocycles mimic the cis conformer of GPE, whereas the others, including I TFA, mimic the trans conformer of GPE.

IT 549521-78-0P 549521-80-4P 549521-81-5P 765313-56-2P 765313-68-6P 765313-69-7P 765313-84-6P 765313-85-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of macrocyclic analogs of neuroprotective agent glycyl-L-prolyl-L-glutamic acid via Grubbs ring closing metathesis).

IT 765313-71-1P 765313-87-9P 908568-57-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of macrocyclic analogs of neuroprotective agent

glycyl-L-prolyl-L-glutamic acid via Grubbs ring closing metathesis) 549521-78-0P

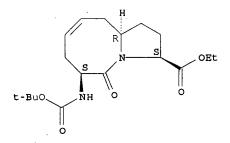
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of macrocyclic analogs of neuroprotective agent glycyl-L-prolyl-L-glutamic acid via Grubbs ring closing metathesis)

RN 549521-78-0 HCAPLUS

CN Pyrrolo[1,2-a]azocine-3-carboxylic acid, 6-[[(1,1-dimethylethoxy)carbonyl]amino]-1,2,3,5,6,7,10,10a-octahydro-5-oxo-, ethyl ester, (3S,6S,10aR)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RE.CNT 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:817638 HCAPLUS

DN 141:314630

TI Preparation of neuroprotective macrocyclic compounds

IN Harris, Paul W. R.; Brimble, Margaret Anne

PA Neuronz Limited, N. Z.; Neuronz Biosciences, Inc.

SO PCT Int. Appl., 106 pp.

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Patent
DT
LA
     English
FAN.CNT 1
                                                                    DATE
     PATENT NO.
                         KIND
                                DATE
                                             APPLICATION NO.
                                 20041007
                                             2004WO-US08108
                                                                     20040316 <--
PΙ
     WO2004084809
                          A2
                                 20050630
     WO2004084809
                          A3
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             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ,
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             TD, TG
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PRAI 2003US-456136P ₽ 20030320 2003US-505119P 20030923 · <--2004WO-US08108 W 20040316 <--

A2

os MARPAT 141:314630

CODEN: PIXXD2

$$R^2$$
  $R^2$   $R^1$   $R^2$   $R^2$   $R^2$   $R^3$   $R^4$   $R^4$ 

- The invention relates to macrocyclic peptidomimetics, e.g., I [R1, R2 are AB H, OR', SR', NR'2, NO2, CN, C(O)R', C(O)OR', C(O)NR'2, C(NR')NR'2, trihalomethyl, halo, (un)substituted alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, arylalkyl or heteroarylalkyl, where R' is H, alkyl, heteroalkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl or heteroarylalkyl; X is CO-C4 alkyl or alkenyl], or their pharmaceutically-acceptable salts that are neuroprotective and have utility as therapeutic agents for the treatment of diseases, injuries and other conditions characterized by neuronal degeneration and/or death. Thus, macrocyclic compound II TFA salt was prepared via cyclization of cis-N-[allyl(benzyloxycarbonyl)glycyl]-5-allylproline tert-Bu ester and assayed for biol. activity (neuronal survival in animals following excitotoxic oxidative stress and neuroprotective effects in a global model of brain ischemia).
- 765313-58-4P 765313-71-1P 765313-87-9P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
- (preparation of neuroprotective macrocyclic compds.) 765313-58-4P
  - RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
  - (preparation of neuroprotective macrocyclic compds.)
- RN 765313-58-4 HCAPLUS
- L-Glutamic acid, N-[[(6S,10aR)-6-amino-2,3,5,6,7,10-hexahydro-5oxopyrrolo[1,2-a]azocin-10a(1H)-yl]carbonyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM

CRN 765313-57-3 CMF C16 H23 N3 O6

### Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

L40 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:326583 HCAPLUS

DN 139:69511

TI Synthesis of Cyclic Proline-Containing Peptides via Ring-Closing Metathesis

AU Harris, Paul W. R.; Brimble, Margaret A.; Gluckman, Peter D.

CS NeuronZ Medicinal Chemistry Group, Department of Chemistry, University of Auckland, Auckland, N. Z.

SO Organic Letters (2003), 5(11), 1847-1850

CODEN: ORLEF7; ISSN: 1523-7060

PB American Chemical Society

DT Journal

LA English

OS CASREACT 139:69511

GI

$$H_2C$$
 $CO_2Bu-t$ 
 $CO_2Bu-t$ 
 $CO_2Bu-t$ 
 $CO_2CH_2Ph$ 
 $CO_2CH_2Ph$ 

AB Several dienes embedded in di- and tripeptides which incorporate proline have been prepared and subjected to ring-closing metathesis. Bicyclic peptides of well-defined amide geometry and of varying ring sizes were prepared For example, allylprolinate I underwent ring-closing metathesis in presence of Grubbs catalyst in CH2Cl2 to give cyclic peptide II in 46% yield after 48 h. Several limitations of the cyclization step were revealed.

IT 549521-78-0P 549521-80-4P 549521-81-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of cyclic proline peptides via ring-closing metathesis reaction)

IT 549521-78-0P

CN

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of cyclic proline peptides via ring-closing metathesis reaction)

RN 549521-78-0 HCAPLUS

Pyrrolo[1,2-a]azocine-3-carboxylic acid, 6-[[(1,1-dimethylethoxy)carbonyl]amino]-1,2,3,5,6,7,10,10a-octahydro-5-oxo-, ethylester, (3S,6S,10aR)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

## RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1995:858286 HCAPLUS

DN 124:56673

TI Synthesis of a type-VI $\beta$ -turn peptide mimetic and its incorporation into a high-affinity somatostatin receptor ligand

AU Gramberg, Dieter; Weber, Christoph; Beeli, Reto; Inglis, Janice; Bruns, Christian; Robinson, John A.

CS Institute Organic Chemistry, University Zuerich, Zurich, CH-8057, Switz.

Helvetica Chimica Acta (1995), 78(6), 1588-606

CODEN: HCACAV; ISSN: 0018-019X

PB Verlag Helvetica Chimica Acta

DT Journal

LA English

CASREACT 124:56673

OS GI

SO

AB The synthesis of a cis-Phe-Pro dipeptide mimetic is described, which adopts a type-VI $\beta$ -turn conformation. The  $\alpha$ -positions of Phe and Pro are joined by a CH2CH2 bridge, thereby forming a fused bicyclic system, and fixing a geometry similar to that seen in cis-Phe-Pro units in protein crystal structures. The dipeptide mimetic I was synthesized in optically pure form starting from (R)- $\alpha$ -allylproline, with a free carboxylic acid and an Fmoc-protected N-terminus, thereby allowing its incorporation into linear and cyclic peptides using standard solid-phase methods. The mimetic I was incorporated into the cyclic somatostatin analog cyclo(-Phe=Pro-Phe-D-Trp-Lys-Thr-), where Phe=Pro represents the mimetic. This analog shows a high affinity for somatostatin receptors. Based on NMR studies in aqueous solution, likely low-energy conformations for this analog were deduced using restrained dynamic simulated annealing. The conformations found, which include a distorted type-II' turn at D-Trp-Lys, are similar to low-energy conformations for cyclo(-Phe-Pro-Phe-D-Trp-Lys-Thr-), and to those in crystal structures of octreotide.

172039-57-5P IT

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of a type-VIβ-turn peptide mimetic and a high-affinity somatostatin receptor ligand containing it)

172039-57-5P TT

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of a type-VIβ-turn peptide mimetic and a high-affinity somatostatin receptor ligand containing it)

RN 172039-57-5 HCAPLUS

L-Threonine, N-[N2-[N-[[6-aminohexahydro-5-oxo-6-(phenylmethyl)-8a(1H)indolizinyl]carbonyl]-L-phenylalanyl]-1-[(1,1-dimethylethoxy)carbonyl]-Dtryptophyl]-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl]-O-(1,1dimethylethyl) -, (6S-cis) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

### => d bib abs hitstr 130 tot

ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN L30

2006:1108672 HCAPLUS AN

DN 146:81752

TI Synthesis and evaluation of novel 8,5-fused bicyclic peptidomimetic

compounds as interleukin-1\beta converting enzyme' (ICE) inhibitors

Soper, David L.; Sheville, Justin X.; O'Neil, Steven V.; Wang, Yili; ΔII Laufersweiler, Michael C.; Oppong, Kofi A.; Wos, John A.; Ellis, Christopher D.; Baize, Mark W.; Chen, Jack J.; Fancher, Amy N.; Lu, Wei; Suchanek, Maureen K.; Wang, Richard L.; Schwecke, William P.; Cruze, Charles A.; Buchalova, Maria; Belkin, Marina; Wireko, Fred; Ritter, Amanda; De, Biswanath; Wang, Difei; Demuth, Thomas P.

CS

Procter & Gamble Pharmaceuticals, Inc., Mason, OH, 45040, USA Bioorganic & Medicinal Chemistry (2006), 14(23), 7880-7892 SO CODEN: BMECEP; ISSN: 0968-0896

PΒ Elsevier Ltd.

DTJournal

LA English

os CASREACT 146:81752

An 8,5-fused bicyclic peptidomimetic ring system generated by a stereoselective ring metathesis reaction was elaborated into potent inhibitors of interleukin-1β converting enzyme (ICE, caspase-1). Multiple compds. were found that exhibited ICE IC50 values <10 nM and were selective over caspase-3 and caspase-8. These active analogs generally possessed good activity (IC50 values <100 nM) in a whole cell assay measuring IL-1 $\beta$  production Pharmacokinetic anal. of the Et acetal prodrug form of a selected active lead revealed a compound with a reasonable plasma half-life (1.1 h) and good oral bioavailability (30%).

TT 917244-20-3DP, amides

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and evaluation of peptidomimetic octahydropyrroloazocinecarboxa mides as interleukin-1β converting enzyme inhibitors)

RN 917244-20-3 HCAPLUS

CN Butanoic acid, 3-[[(3S,6S,10aR)-6-amino-1,2,3,5,6,7,10,10a-octahydro-5oxopyrrolo[1,2-a]azocin-3-yl]carbonyl]amino]-4,4-diethoxy-,
1,1-dimethylethyl ester, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:1233229 HCAPLUS

DN 144:129220

TI Targeting integrins: Insights into structure and activity of cyclic RGD pentapeptide mimics containing aza-bicyclo-alkane amino acids

AU Belvisi, Laura; Bernardi, Anna; Colombo, Matteo; Manzoni, Leonardo; Potenza, Donatella; Scolastico, Carlo; Giannini, Giuseppe; Marcellini, Marcella; Riccioni, Teresa; Castorina, Massimo; LoGiudice, Pietro; Pisano, Claudio

CS Dipartimento di Chimica Organica e Industriale and Centro Interdisciplinare Studi bio-molecolari e applicazioni Industriali, (CISI), Universita degli Studi di Milano, Milan, I-20133, Italy

SO Bioorganic & Medicinal Chemistry (2006), 14(1), 169-180

CODEN: BMECEP; ISSN: 0968-0896

PB Elsevier B.V.

DT Journal

LA English

OS CASREACT 144:129220

GΙ

A small library of cyclic RGD pentapeptide mimics incorporating stereoisomeric 5,6- and 5,7-fused bicyclic lactams was synthesized. library was found to contain high-affinity ligands for the  $\alpha\nu\beta3$ integrin. The aim of this study was to investigate activity, selectivity, and structure of these ligands in order to identify new specific  $\alpha v$ -integrin antagonists that could be evaluated as tumor angiogenesis inhibitors. In vitro screening, including receptor-binding assays to purified  $\alpha v \beta 3$ ,  $\alpha v \beta 5$ , and  $\alpha 5 \beta 1$ integrins, and platelet aggregation assay, revealed cyclo-peptide I (ST1646) as a potent, highly selective  $\alpha v\beta 3/\alpha v\beta 5$ integrin antagonist. Structure determination of the cyclic RGD pentapeptide mimics performed by a combination of NMR spectroscopy, and mol. mechanics and dynamics calcns. showed a strong dependence of the RGD cyclo-peptide conformation on lactam ring size and stereochem. ST1646 revealed the highest ability within the library to adopt the proper RGD orientation required for binding to the  $\alpha v \beta 3$  integrin, as deduced from the recently solved crystal structure of the extracellular segment of integrin  $\alpha v \beta 3$  in complex with a cyclic pentapeptide ligand. 873460-96-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation, conformation, structure-property, of cyclic RGD pentapeptide mimics containing aza-bicyclo-alkane amino acids as integrin inhibitors)

873460-96-9 HCAPLUS RN

Glycine, N2-[[(3S,6R,9aR)-6-aminooctahydro-5-oxo-1H-pyrrolo[1,2-a]azepin-3-CN yl]carbonyl]-N5-[[[(3,4-dihydro-2,2,5,7,8-pentamethyl-2H-1-benzopyran-6yl)sulfonyl]amino]iminomethyl]-L-ornithyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

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THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 52 ALL CITATIONS AVAILABLE IN THE RE FORMAT

T.30 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2002:779650 HCAPLUS

DN 138:331199

Exploring relationships between mimic configuration, peptide conformation TI and biological activity in indolizidin-2-one amino acid analogs of gramicidin S

ΑU Roy, S.; Lombart, H.-G.; Lubell, W. D.; Hancock, R. E. W.; Farmer, S. W.

Departement de chimie, Universite de Montreal, Montreal, QC, H3C 3J7, Can. CS

SO Journal of Peptide Research (2002), 60(4), 198-214

CODEN: JPERFA; ISSN: 1397-002X PΒ Blackwell Munksgaard

ידת Journal

LΑ English

os CASREACT 138:331199

AB Indolizidin-2-one amino acids (I2aas) possessing 6S- and 6R-ring-fusion stereochem. were introduced into the antimicrobial peptide gramicidin (GS) to explore the relationships between configuration, peptide conformation and biol. activity. Solution-phase and solid-phase techniques were used to synthesize three analogs with I2aa residues in place of the D-Phe-Pro residues at the turn regions of GS: [(6S)-I2aa4-5,4'-5']GS (I), [Lys2,2',(6S)-I2aa4-5,4'-5']GS (II) and [(6R)-I2aa4-5,4'-5']GS (4) Although conformational anal. of [I2aa4-5,4'-5']GS analogs 2-4 indicated that both ring-fusion stereoisomers of I2aa gave peptides with CD and NMR spectral data characteristic of GS, the (6S)-I2aa analogs I and II exhibited more intense CD curve shapes, as well as greater nos. of nonsequential NOE between opposing Val and Leu residues, relative to the (6R)-I2aa analog, suggesting a greater propensity for the (6S)-diastereomer to adopt the  $\beta$ -turn/antiparallel  $\beta$ -pleated sheet conformation. In measurements of antibacterial and antifungal activity, the (6S)-I2aa analog I exhibited significantly better potency than the (6R)-I2aa diastereomer. Relative to GS, I exhibited usually 1/2 to 1/4 antimicrobial activity as well as 1/4 hemolytic activity. In certain cases, antimicrobial and hemolytic activities of GS were shown to be dissociated through modification at the peptide turn regions with the (6S)-I2aa diastereomer. The synthesis and evaluation of GS analogs has furnished new insight into the importance of ring-fusion stereochem. for

turn mimicry by indolizidin-2-one amino acids as well as novel antimicrobial peptides.

IT 518027-76-4P 518027-78-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and antimicrobial structure activity relationships of indolizidin-2-one amino acid analogs of gramicidin S)

RN 518027-76-4 HCAPLUS

CN L-Leucine, N-[[(3S,6S,8aS)-6-aminooctahydro-5-oxo-3-indolizinyl]carbonyl]L-valyl-N5-[(phenylmethoxy)carbonyl]-L-ornithyl-, 2-propenyl ester,
mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 518027-75-3 CMF C36 H54 N6 O8

### Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 518027-78-6 HCAPLUS

L-Leucine, N-[[(3S,6S,8aS)-6-aminooctahydro-5-oxo-3-indolizinyl]carbonyl]-L-valyl-N5-[(phenylmethoxy)carbonyl]-L-ornithyl-L-leucyl-(3S,6S,8aS)-6-aminooctahydro-5-oxo-3-indolizinecarbonyl-L-valyl-N5-[(phenylmethoxy)carbonyl]-L-ornithyl- (9CI) (CA INDEX NAME)

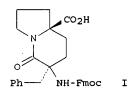
### Absolute stereochemistry.

PAGE 1-B

RE.CNT THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib abs hitstr 137

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ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN
AN
     1995:858286 HCAPLUS
DN
TI
     Synthesis of a type-VIB-turn peptide mimetic and its incorporation
     into a high-affinity somatostatin receptor ligand
     Gramberg, Dieter; Weber, Christoph; Beeli, Reto; Inglis, Janice; Bruns,
ΑU
     Christian; Robinson, John A.
CS
     Institute Organic Chemistry, University Zuerich, Zurich, CH-8057, Switz.
     Helvetica Chimica Acta (1995), 78(6), 1588-606
so
     CODEN: HCACAV; ISSN: 0018-019X
PB
     Verlag Helvetica Chimica Acta
DT
     Journal
LA
     English
     CASREACT 124:56673
OS
GΙ
```



The synthesis of a cis-Phe-Pro dipeptide mimetic is described, which AB adopts a type-VI $\beta$ -turn conformation. The  $\alpha$ -positions of Phe and Pro are joined by a CH2CH2 bridge, thereby forming a fused bicyclic system, and fixing a geometry similar to that seen in cis-Phe-Pro units in protein crystal structures. The dipeptide mimetic I was synthesized in optically pure form starting from  $(R)-\alpha$ -allylproline, with a free carboxylic acid and an Fmoc-protected N-terminus, thereby allowing its incorporation into linear and cyclic peptides using standard solid-phase methods. The mimetic I was incorporated into the cyclic somatostatin analog cyclo(-Phe=Pro-Phe-D-Trp-Lys-Thr-), where Phe=Pro represents the mimetic. This analog shows a high affinity for somatostatin receptors. Based on NMR studies in aqueous solution, likely low-energy conformations for this analog were deduced using restrained dynamic simulated annealing. The conformations found, which include a distorted type-II' turn at D-Trp-Lys, are similar to low-energy conformations for cyclo(-Phe-Pro-Phe-D-Trp-Lys-Thr-), and to those in crystal structures of octreotide. IT 172039-57-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of a type-VIB-turn peptide mimetic and a high-affinity somatostatin receptor ligand containing it)

RN 172039-57-5 HCAPLUS

 $L-Threonine, \ N-[N2-[N-[N-[6-aminohexahydro-5-oxo-6-(phenylmethyl)-8a(1H)-1] \\$ indolizinyl]carbonyl]-L-phenylalanyl]-1-[(1,1-dimethylethoxy)carbonyl]-Dtryptophyl]-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl]-O-(1,1dimethylethyl)-, (6S-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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FILE 'REGISTRY' ENTERED AT 09:55:31 ON 28 JUL 2007

L1 STR

L2 50 L1

FILE 'HCAPLUS' ENTERED AT 09:58:11 ON 28 JUL 2007

L3 4 US20060217295/PN OR (US2006-549951 OR WO2004-US8108 OR US2003-4

L4 1 L3 AND NEUROPROTECTIVE

FILE 'REGISTRY' ENTERED AT 10:00:13 ON 28 JUL 2007

FILE 'HCAPLUS' ENTERED AT 10:00:13 ON 28 JUL 2007

L5 TRA L4 1- RN : 107 TERMS

FILE 'REGISTRY' ENTERED AT 10:00:13 ON 28 JUL 2007

L6 107 SEA L5 L7 12 L6 AND

12 L6 AND (NC4-NC4 OR NC4-NC5 OR NC4-NC6 OR NC4-NC7)/ES

L8 151 C16H25N3O6

L9 7 L8 AND (NC4-NC4 OR NC4-NC5 OR NC4-NC6 OR NC4-NC7)/ES

L10 6 L9 NOT ?SPIRO?

FILE 'HCAPLUS' ENTERED AT 10:05:59 ON 28 JUL 2007

L11 2 L10 L12 4 L7

L13 4 L11-12

L14 1 L13 AND L3

L15 3 L13 NOT L14

FILE 'REGISTRY' ENTERED AT 10:11:42 ON 28 JUL 2007

L16 1389 L1 FULL

SAV TEM J951C16/A L16

L17 STR L1

L18 22 L17 SAM SUB=L16

L19 STR L17

L20 2 L19 SAM SUB=L16

L21 32 L19 FULL SUB=L16 SAV TEM J951C1/A L21

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L22 16 L21

E HARRIS P/AU

L23 164 E3, E27-28

E HARRIS PAUL/AU L24 85 E3.E26-30

E BRIMI

E BRIMBLE M/AU

L25 221 E4, E6-8

L26 2 L22 AND L3,L23-25

L27 14 L22 NOT L26

SEL HIT RN L27

## 10 / 549951

L28	FILE 'REGISTRY' ENTERED AT 10:19:39 ON 28 JUL 2007 23 E1-23
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L30	FILE 'HCAPLUS' ENTERED AT 10:27:28 ON 28 JUL 2007 3 L29
110	3 229
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L31	U L21 :
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L32	
L33	
L34	
	SAV TEM L34 J951C6/A
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L35	·
	2 L35 AND L4,L23-25
L37	·
	SEL HIT RN
	FILE 'REGISTRY' ENTERED AT 10:32:03 ON 28 JUL 2007
L38	1 E24
	FILE 'HCAOLD' ENTERED AT 10:32:25 ON 28 JUL 2007
L39	0 L34
	FILE 'HCAPLUS' ENTERED AT 10:32:51 ON 28 JUL 2007
L40	5 L15,L26,L34